Application No. 10/772,478
Amendment dated May 21, 2007
Reply to Office Action of September 1, 2006

## Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the application:

## Listing of Claims:

1.(Currently amended) In-a-An Apparatus for a radio communication system having a network part that maintains at-least-a network-copy of a first database containing data and a mobile node that maintains at-least-a-mobile-copy of the\_first database containing data, the data of the network-copy and data of the mobile-copy of the first database, respectively, correspond corresponding when the data in the network-copy of the first database and the data in the mobile-copy of the first database are in-match with-one another, an improvement of said apparatus for selectably altering the data of at least one of the network-copy and the mobile-copy of the at-least the-first database to place the network-copy and the mobile-copy in match with each other, said apparatus comprising:

a hash generator embodied at the mobile node and adapted to receive representations of at least data from the mobile-copy of the at least the first database, said hash generator being capable of selectably for forming first and second types of hash values of data received by said hash generator, the first type of hash value being computed using a first technique, the second type of hash value being computed using a first technique, the second type of hash value being computed using a first technique, the second type of hash value being formed values for communication to the network part to determine whether the network-copy and the mobile-copy are in match with one another, said second type of hash value being computed and communicated to the network part, after said first type of hash value has been computed and communicated to the network part and used by the network part to determine that the network-copy and the mobile-copy are not in match with one another; and

a content retriever embodied at the mobile node, said content retriever for retrieving data from the mobile-copy of the at least the first database upon receipt of a first signal, the first signal originating from the network part and indicating the network part's detection of determination that the network-copy of the first database and the mobile-copy of the first

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database are out of match, the first signal being sent by the network part after the network part receives both the first type of hash value and the second type of hash value, the data retrieved by said content retriever for communication to the network part, and to be used by the network part to synchronize match the network-copy and the mobile-copy to each other, theretogether.

(Currently amended) The apparatus of claim 1 wherein said hash generator generates
the <u>first type of</u> hash values responsive to an external triggering event, occurrence of which is
detectable at the mobile node.

3. (Currently amended) The apparatus of claim 1 wherein said hash generator generates the <u>second type of</u> hash values responsive to an external triggering event, occurrence of which is detectable at the mobile node.

4. (Currently amended) The apparatus of claim 3 wherein said hash generator generates the first-type hashes upon detection of an external triggering event, the indications of occurrence of which is detectable at the mobile node and wherein said hash generator generates the second-type hashes responsive to a network part determination that of mismatch of the first-type hashes, generated by said hash generator did not match a first type of hash generated by the network part, generator, with network calculated values.

5. (Currently amended) The apparatus of claim [[4]]11 wherein the data maintained at the network-copy and the mobile-copy of the at-least-the first database is comprised of data records, each data record being comprised formed of fields including at least a first key field and at least a first record field, and wherein the second-type hashes selectably generated by said hash generator are formed of values of the at least the first key field.

6. (Currently amended) The apparatus of claim [[5]] wherein the determination that the network-copy and the mobile-copy are out of match is made responsive to values of the second-type hashes formed of the values of the at least the key field.

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(Currently amended) The apparatus of claim [[5]] 1 wherein the data retrieved by said
content retriever comprises both the at least the first key field and the at least the first record
field.

- 8. (Currently amended) In-the-The radio communication system of claim 1, wherein the network part comprises; a further-improvement of apparatus for the network-part also for selectably altering the data of at least one of the network-copy and the mobile-copy of the at least the first database, said apparatus comprising:
- a determiner embodied at the network part and which is adapted to receive hash values of the hash-generated by said hash generator embodied at the mobile node, said determiner for determining whether the hash values generated by the hash generator at the mobile node, match with corresponding hash values generated at the network part; of the hash-correspond with locally generated values; and
- a requestor coupled to said determiner to receive indications that a hash value from the mobile node does not match a corresponding hash value generated at the network part, of determinations made thereat, said requester selectably for requesting from the mobile node, additional information associated with the mobile-copy of the at least the first database.
- 9. (Currently amended) The apparatus of claim 8 wherein the hash <u>values generated at the network part include said by said hash generator is selectably of a first type of hash value hash-type and at least a said second type of hash value, hash-type, and wherein the locally-generated values with which said determiner compares the hash are correspondingly selectably of a first hash-type and a second hash-type.</u>
- 10. (Currently amended) The apparatus of claim 8 wherein the additional information requested by said requestor comprises a request for the mobile node to deliver the second type of hash value\_information of the second hash-type to the comparator.

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11. (Currently amended) The apparatus of claim 8 wherein the data maintained at the network-copy and the mobile-copy of the at least the first database is comprised of data records and wherein the additional information requested by said requestor comprises a request for the mobile node to deliver values of at least portions of the data records.

- 12. (Currently amended) The apparatus of claim 11 further comprising a comparator adapted to receive from the mobile node, the values of the at least the data records or portions thereof and adapted to compare of the data records responsive to the request therefor to the mobile node, said comparator for comparing the data records or portions thereof from the mobile node, to values with corresponding values of the network-copy of the at-least the first database.
- 13. (Currently amended) The apparatus of claim 12 further comprising a database value updater coupled to said comparator, said database value updater <u>being selectably operable</u> responsive to comparisons made by said comparator to alter at least one data record of a selected one of the mobile-copy and the network-copy of the at least the first database.
- 14. (Currently amended) The apparatus of claim 13 wherein said database value updater operates pursuant to a selected conflict resolution protocol.
- 15. (Currently amended) In a A method for a method of communicating in a radio communication system having a network part that maintains at least a network-copy of a first database containing data and a mobile node that maintains at least a mobile-copy of the first database, containing data, the data of the network-copy and the mobile-copy of the first database respectively, corresponding to each other when data in the network-copy and data in the mobile-copy of the first database are in-match with one another, an improvement of a said method for selectably-synchronizing altering the data of at least one of the network-copy of the first database with the and the mobile-copy of the at least the first database to place the network-copy and the mobile-copy in match with each other, said method comprising:

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selectably-sending a first hash value that is calculated from a first portion of the first database using a first technique information from the mobile node to the network part, the first hash value information representative of the mobile-copy of the first database;

comparing, at the network part, the first hash value received from the mobile node, to a second hash value calculated at the network part from a first portion of the network copy of the first database using the first technique, information sent during said operation of selectably sending with corresponding network-copy first hash information;

 ${\color{blue} comparing, at the network part, the first hash information sent during said operation of selectably sending with corresponding network copy-first hash information; and }$ 

selectably-requesting from the mobile node, a third hash value that is calculated at the mobile node from the mobile copy of the first database using a second technique; and

at the network part, comparing the third hash value received from the mobile to a fourth hash value calculated at the network part from the network copy of the first database using said second technique;

whereby the network copy of the first database and the mobile node copy of the first database are determined to be different from each other when the first and second hash values are different from each other or when the third and fourth hash value are different from each other, additional information regarding the mobile copy first database responsive to comparisons made during said operation of comparing the first hash information.

16. (Currently amended) The method of claim 15 wherein the <a href="https://disabsec.nd/wherein the">https://disabsec.nd/wherein the</a> calculated from the first portion of the mobile node copy of the first database and wherein the fourth hash value is calculated from a corresponding first portion of the network copy of the first database, additional information requested during said operation of selectably requesting comprises second hash information from the mobile node to the network part, the second hash information also representative of the mobile copy of the at least the first database.

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17. (Currently amended) The method of claim [[16]] 15 further comprising the operations of:

sending the second hash information from the mobile node to the network part;
comparing, at the network part, the second hash information sent during said operation of
sending the second hash information with corresponding network-copy second hash information;
and selectably

requesting at least a <u>portion portions</u> of the mobile-copy of the at-least-the-first database to be transmitted from the mobile node to the network in response to a comparison of the third <u>hash value to the fourth hash value</u>, responsive to comparisons made during said operation of comparing the second hash information.

18. (Currently amended) The method of claim 17 further comprising the operations of:

-delivering the at least a portion the portions of the mobile-copy to the network part;

-comparing the portion portions of the mobile copy delivered to the network part during said operation of delivering with a corresponding portion portions of the network-copy of the at least the-first database:: and

selectably eausing overwriting of the portions of a selected one of the network-copy of the first database and the mobile-copy of the first database responsive to comparisons made during said operation of comparing the portions of the mobile-copy to the network copy.

- 19. (Currently amended) The method of claim 18 wherein athe-selected one of the network-copy and the mobile-copy of which the portions thereof are selectably eaused to be overwritten is selected-according to a conflict resolution scheme.
- 20. (Currently amended) The method of claim 19 further comprising the operation of creating a change-history by indicating which portions of the database were overwritten, overwriting of the portions selectably caused during said operation of selectably causing.